TOPIC:

A STUDY OF THE EFFECT AND OUTCOME OF LASERS IN VARIOUS RETINAL DISORDERS IN A TERTIARY CARE CENTRE

AIM:

To acquire knowledge about the visual prognosis and effects on the disease following doubled frequency Nd YAG laser.

OBJECTIVES:

To analyse the visual outcome and disease status following doubled frequency Nd YAG laser.

STUDY CENTRE:

Vitreretinalservices,RegionalInstituite of Ophthalmology,Government Ophthalmic hospital,Madras Medical College,Chennai

DURATION OF STUDY:

One year(Nov 2017 to Oct 2018)

STUDY DESIGN:

Prospective study

SAMPLE SIZE:

150 cases

INCLUSION CRITERIA:

All age groups

Patients with Diabetic retinopathy

Vascular occlusion

Macular Edema

High myopia

Retinopathy of prematurity

Central serous retinopathy

EXCLUSION CRITERIA:

Patients in whom other concurrent treatment like Anti VEGF,PPV given

METHODOLOGY:

1)On first examination detailed present and past history will be recorded

2)Visual acuity and intraocular pressure testing followed by anterior segment examination

3)Detailed fundus examination,Fundus Fluorescein Angiography and OCT

4)Patients will be treated with frequency doubled Nd YAG laser

FOLLOW UP:

Immediate follow up:1week post laser

Late follow up:4 weeks post laser

RESULTS AND ANALYSIS:

In our study, 170 eyes of 148 patients were included.PRP,GRID,FOCAL,BARRAGE laser were given.

In PRP, in cases of diabetic retinopathy treatment in early stages prevent the progression to complications than treating in late stages. In vascular occlusion treating in early stages with NVE in one quadrant prevents further complication than treating a eye with florid NVE. There ia increase in macular edema following PRP.

In GRID there is no significant change in CFT or BCVA following GRID laser.

In FOCAL there is a significant improvement in BCVA or CFT following FOCAL laser

In BARRAGE laser ther are no new breaks or detachment following laser.

CONCLUSION:

In PRP,FOCAL,BARRAGE laser, early treatment prevents further complications.

In GRID, there is n significant improvement.

KEYWORDS:

LASER – Light Amplification by Stimulated Emission of Radiation

RPE- Retinal Pigment Epithelium

PRP- Pan Retinal Photocoagulation

CSCR- Central Serous ChorioRetinopathy

CNVM- Choroidal Neovascular Memberane

NPDR-Non Proliferative Diabetic Retinopathy

PDR-Proliferative Diabetic Retinopathy

HR PDR – High Risk Proliferative Diabetic Retinopathy

CSME- Clinically Significant Macular Edema.

ME-Macular Edema

CFT-Central Foveal Thickness

Vascocc-Vascular Occlusion

BCVA-Best Corrected Visual Acuity

ETDRS- Early Treatment of Diabetic Retinopathy Study